

wherein said grid voltage control means has:

a negative voltage generating section for generating a predetermined negative voltage;

a pulse inverter for inputting said pulse generated by said pulse generating means and

generating an inverted pulse in which said ON and OFF states of said inputted pulse are inverted;

a first switch for inputting said inverted pulse generated by said pulse inverter and

outputting, when said inverted pulse is in said ON state, said predetermined negative voltage

generated by said negative voltage generating section;

a reference voltage generating section for generating a reference positive voltage;

a second switch for inputting said pulse generated by said pulse generating means and

outputting, when said pulse is in said ON state, said reference positive voltage generated by said

reference voltage generating section;

an operational amplifier having one input terminal for inputting a voltage generated by  
said cathode current detecting resistor and the other input terminal for inputting said

predetermined negative voltage outputted from said first switch and said reference positive

voltage outputted from said second switch; and

a grid voltage control circuit for controlling, in response to an output from said  
operational amplifier, said grid voltage applied to said first grid electrode.

### REMARKS

In the Office Action, claim 3 is objected to as being dependent upon a canceled claim;  
and claims 1 and 3-5 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Skillicorn et al. (U.S. Patent No. 5,077,771) in view of Yahata et al. (U.S. Patent No. 4,734,924).